

wherein

said composition is composed of the inorganic filler (C) and resin components other than the inorganic filler (C) that are comprising the epoxy resin (A), the phenolic resin (B) and the curing accelerator (D), but said composition comprises no flame retardant material nor flame retardant auxiliary;

said composition contains the inorganic filler (C) in the equal amount to a content of W (wt%) for the inorganic filler (C) in a cured article being obtainable by curing the composition, wherein the W (wt%) is selected in range of $30 \leq W \leq 60$;

B | one or more epoxy resins containing an aromatic moiety and/or a poly-aromatic moiety in the molecule are contained in a ratio of 30 to 100 wt% in the total amount of the epoxy resin (A),

one or more phenolic resins containing an aromatic moiety and/or a poly-aromatic moiety in the molecule are contained in a ratio of 30 to 100 wt% in the total amount of the phenolic resin (B), and

a ratio (OH/Ep) of a phenolic hydroxyl group number (OH) of the total phenolic resin to an epoxy group number (Ep) of the total epoxy resin is $1.0 \leq (\text{OH}/\text{Ep}) \leq 2.5$;

the aromatic moiety and/or the polyaromatic moiety is included in a crosslinked structure of the cured article; and

a flexural modulus E (kgf/mm²) at $240 \pm 20^\circ\text{C}$ of the cured article is a value satisfying $0.015W + 4.1 \leq E \leq 0.27W + 21.8$ in

the case of $30 \leq W \leq 60$, and the cured article forms a foamed layer during thermal decomposition or at ignition to exert flame retardancy.

—15. (new) The epoxy resin composition according to Claim 14,

wherein the value of the flexural modulus E is a value satisfying $0.015W + 7.1 \leq E \leq 0.27W + 6.8$ in the case of $30 \leq W \leq 60$.

—16. (new) The epoxy resin composition according to Claim 15,

wherein the aromatic moiety and/or the polyaromatic moiety selected from the group consisting of phenyl derivatives and biphenyl derivatives is included in the crosslinked structure of the cured article.

—17. (new) The epoxy resin composition according to Claim 16,

wherein

the epoxy resin (A) is one or a mixture of two or more epoxy resins containing an aromatic moiety and/or a poly-aromatic moiety in the molecule, and

the phenolic resin (B) is one or a mixture of two or more

phenolic resins containing an aromatic moiety and/or a poly-aromatic moiety in the molecule.

—18. (new) The epoxy resin composition according to Claim 17,

wherein

the epoxy resin (A) is one or a mixture of two or more epoxy resins selected from a group consisting of an epoxy resin of tetraphenylolethane type including one or more aromatic moieties, to which 3 to 4 epoxy groups are bonded, an epoxy resin including a phenyl derivative having no epoxy group, and an epoxy resin including a biphenyl derivative, and

B the phenolic resin (B) is one or a mixture of two or more phenolic resins selected from a group consisting of a phenolic resin including one or more phenyl derivatives having no hydroxyl group and a phenolic resin including one or more biphenyl derivatives having no hydroxyl group.

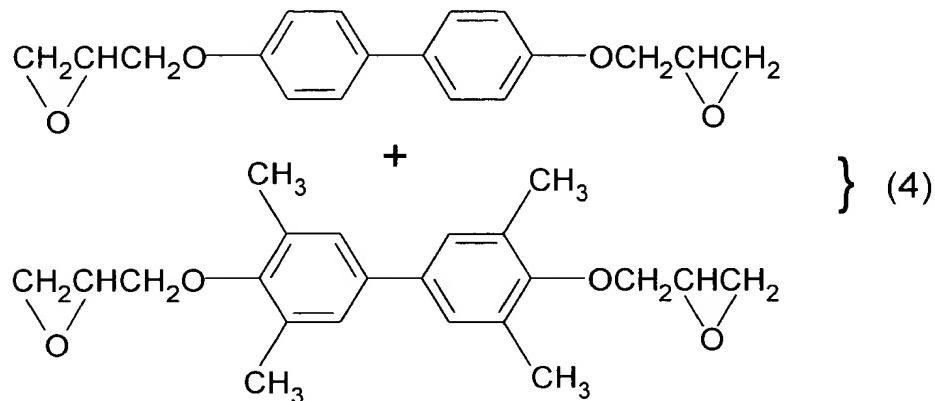
—19 (new). The epoxy resin composition according to Claim 18,

wherein the ratio (OH/Ep) is 1.0.

—20. (new) The epoxy resin composition according to Claim 19,

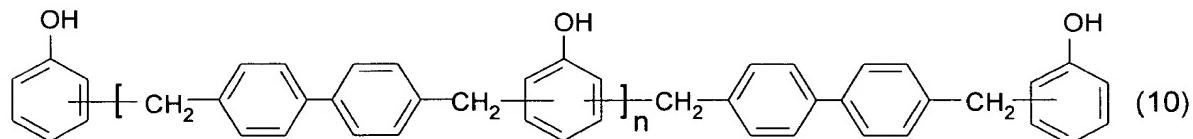
wherein

the epoxy resin (A) is a combinational mixture of biphenyl-4,4'-diglycidyl ether epoxy resin and 3,3',5,5'-tetramethylbiphenyl-4,4'-diglycidyl ether epoxy resin represented by formula (4):



, and

B
the phenolic resin (B) is a phenolbiphenylaralkyl resin represented by formula (10):

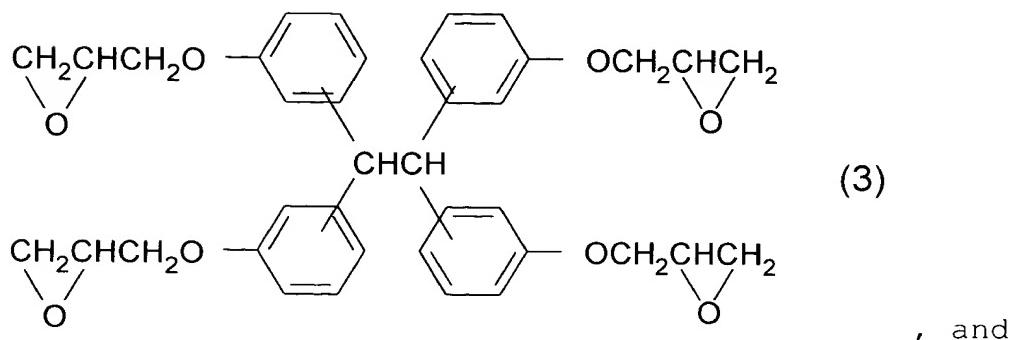


wherein $n = 0$ to 10.

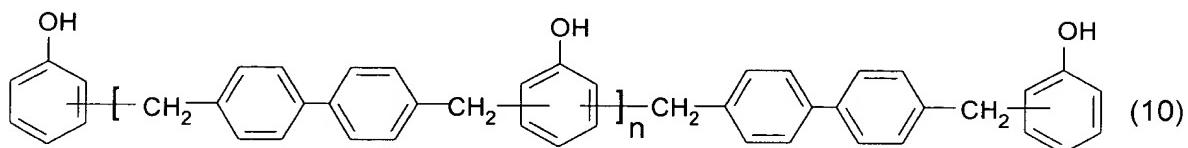
~21. (new) The epoxy resin composition according to Claim 19,

wherein

the epoxy resin (A) is a tetraphenylolethane type epoxy resin represented by formula (3):



the phenolic resin (B) is a phenolbiphenylaralkyl resin represented by formula (10):

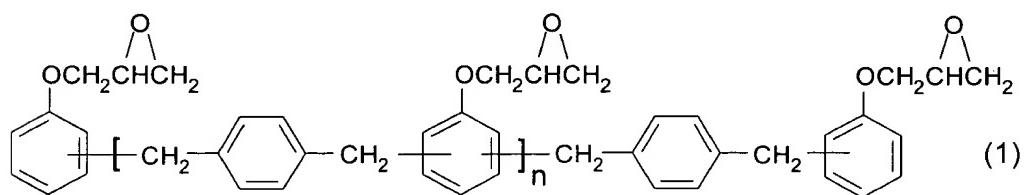


wherein $n = 0$ to 10.

22. (new) The epoxy resin composition according to Claim 19,

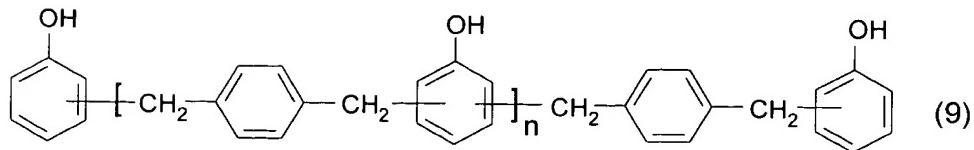
wherein

the epoxy resin (A) is a phenolphenylaralkyl epoxy resin represented by formula (1):



wherein $n = 0$ to 10, and

the phenolic resin (B) is a phenolphenylaralkyl resin represented by formula (9):

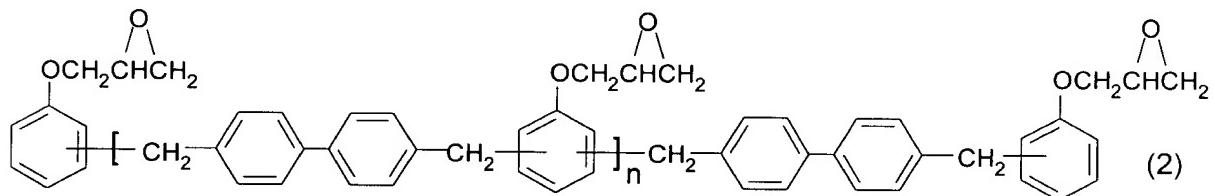


wherein $n = 0$ to 10.

—23. (new) The epoxy resin composition according to Claim 19,

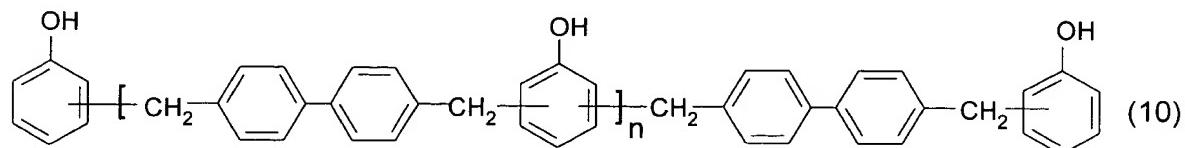
wherein

B
the epoxy resin (A) is a phenolphenylaralkyl epoxy resin represented by formula (2):



wherein $n = 0$ to 10, and

the phenolic resin (B) is a phenolbiphenylaralkyl resin represented by formula (10):

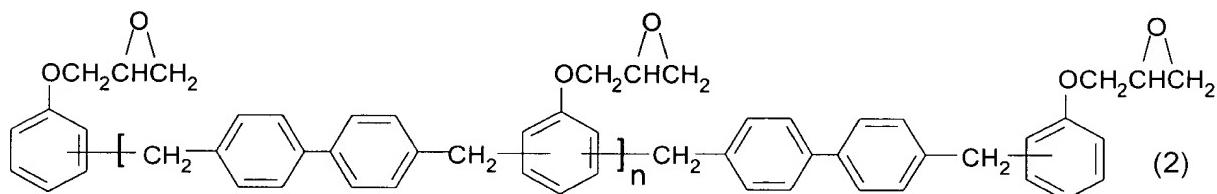


wherein $n = 0$ to 10.

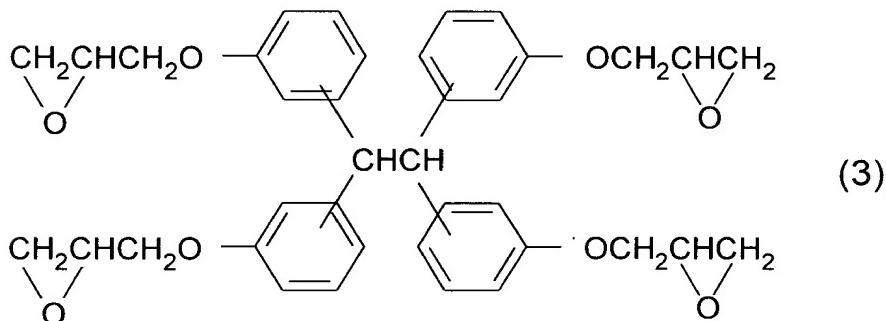
—24. (new) The epoxy resin composition according to Claim 19,

wherein

the epoxy resin (A) is a combinational mixture of a phenolbiphenylaralkyl epoxy resin represented by formula (2):

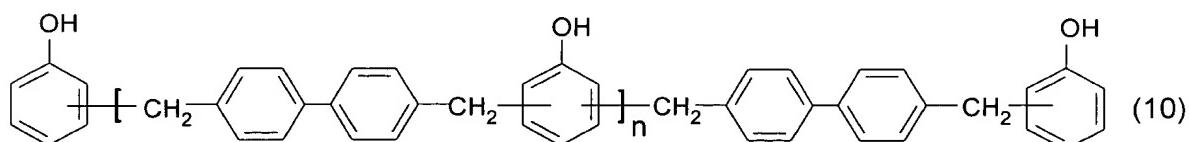


wherein $n = 0$ to 10, with a tetraphenylolethane type epoxy resin represented by formula (3):



, and

the phenolic resin (B) is a phenolbiphenylaralkyl resin represented by formula (10):

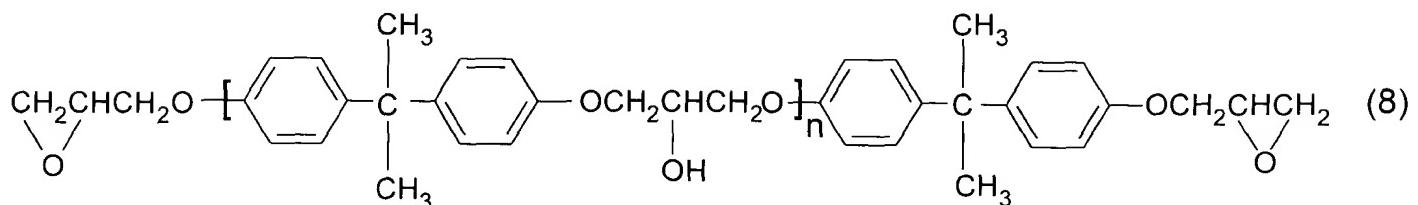


wherein $n = 0$ to 10.

—25. (new) The epoxy resin composition according to Claim 19,

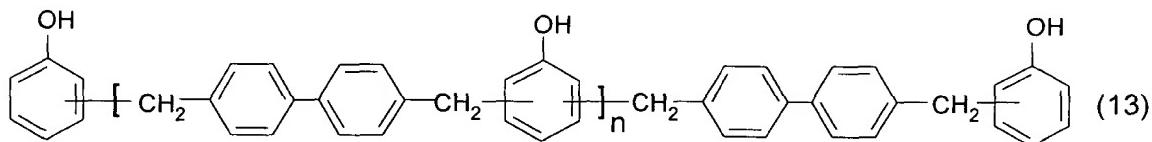
wherein

the epoxy resin (A) is a Bisphenol A type epoxy resin represented by formula (8):



wherein $n = 0$ to 0.8 , and

the phenolic resin (B) is a phenolbiphenylaralkyl resin represented by formula (13):



wherein $n = 0$ to 2 .

—26. (new) A flame retardant epoxy resin composition comprising an epoxy resin (A), a phenolic resin (B), an inorganic filler (C) and a curing accelerator (D):

wherein

said composition is composed of the inorganic filler (C) and resin components other than the inorganic filler (C) that are comprising the epoxy resin (A), the phenolic resin (B) and the

comprising the epoxy resin (A), the phenolic resin (B) and the curing accelerator (D), but said composition comprises no flame retardant material nor flame retardant auxiliary;

said composition contains the inorganic filler (C) in the equal amount to a content of W (wt%) for the inorganic filler (C) in a cured article being obtainable by curing the composition, wherein the W (wt%) is selected in range of $60 < W \leq 95$;

the phenolic resin (B) is one or a mixture of two or more phenolic resins containing biphenyl derivative having no hydroxyl group in the molecule,

B the epoxy resin (A) is one or a mixture of two or more epoxy resins of tetraphenylolethane type including one or more aromatic moieties, to which 3 to 4 epoxy groups are bonded, and

a ratio (OH/Ep) of a phenolic hydroxyl group number (OH) of the total phenolic resin to an epoxy group number (Ep) of the total epoxy resin is $1.0 \leq (\text{OH}/\text{Ep}) \leq 2.5$;

the moiety of the biphenyl derivative having no hydroxyl group is included in a crosslinked structure of the cured article; and

a flexural modulus E (kgf/mm^2) at $240 \pm 20^\circ\text{C}$ of the cured article is a value satisfying $0.30W - 13 \leq E \leq 3.7W - 184$ in the case of $60 < W \leq 95$, and the cured article forms a foamed layer during thermal decomposition or at ignition to exert flame retardancy.

—27. (new) The epoxy resin composition according to Claim 26,

wherein the flexural modulus E (kgf/mm²) at 240 ± 20°C of the cured article is a value satisfying 0.30W - 10 ≤ E ≤ 3.7W - 199 value in the case of 60 < W ≤ 95.

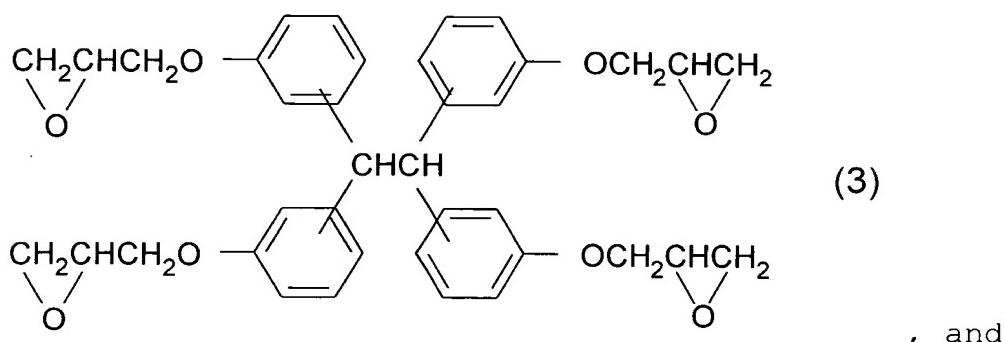
—28. (new) The epoxy resin composition according to Claim 27,

wherein the ratio (OH/Ep) is 1.0.

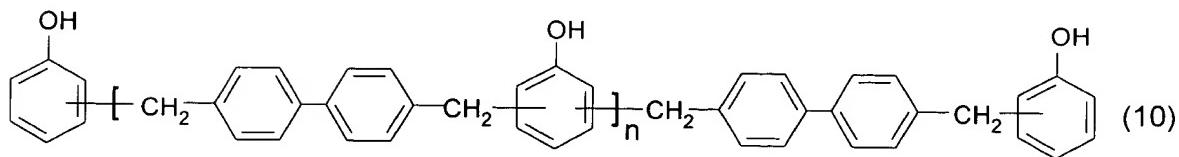
—29. (new) The epoxy resin composition according to Claim 28,

wherein

the epoxy resin (A) is a tetraphenylolethane type epoxy resin represented by formula (3):



the phenolic resin (B) is a phenolbiphenylaralkyl resin represented by formula (10):



wherein n = 0 to 10.

—30. (new) A flame retardant epoxy resin composition comprising an epoxy resin (A), a phenolic resin (B), an inorganic filler (C) and a curing accelerator (D):

B
wherein

said composition is composed of the inorganic filler (C) and resin components other than the inorganic filler (C) that are comprising the epoxy resin (A), the phenolic resin (B) and the curing accelerator (D), but said composition comprises no flame retardant material nor flame retardant auxiliary;

said composition contains the inorganic filler (C) in the equal amount to a content of W (wt%) for the inorganic filler (C) in a cured article being obtainable by curing the composition, wherein the W (wt%) is selected in range of $60 < W \leq 95$;

the phenolic resin (B) is one or a mixture of two or more phenolic resins containing biphenyl derivative having no hydroxyl group in the molecule,

the epoxy resin (A) is a mixture of two or more epoxy resins containing a biphenyl derivative, and

a ratio (OH/Ep) of a phenolic hydroxyl group number (OH) of

the total phenolic resin to an epoxy group number (Ep) of the total epoxy resin is 1.0;

the moiety of the biphenyl derivative having no hydroxyl group is included in a crosslinked structure of the cured article; and

a flexural modulus E (kgf/mm²) at 240 ± 20°C of the cured article is a value satisfying 0.30W - 13 ≤ E ≤ 3.7W - 184 in the case of 60 < W ≤ 95, and the cured article forms a foamed layer during thermal decomposition or at ignition to exert flame retardancy.

—31. (new) The epoxy resin composition according to Claim 30,

wherein

wherein the flexural modulus E (kgf/mm²) at 240 ± 20°C of the cured article is a value satisfying 0.30W - 10 ≤ E ≤ 3.7W - 199 value in the case of 60 < W ≤ 95.

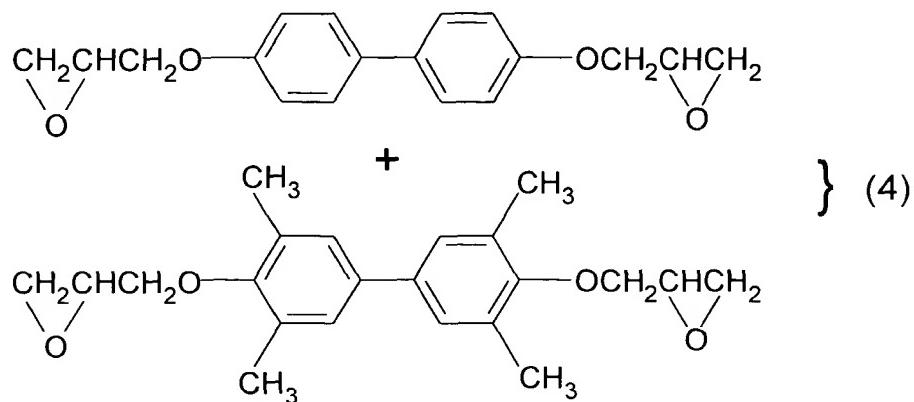
—32. (new) The epoxy resin composition according to Claim 31,

wherein the ratio (OH/Ep) is 1.0.

—33. (new) The epoxy resin composition according to Claim 32,

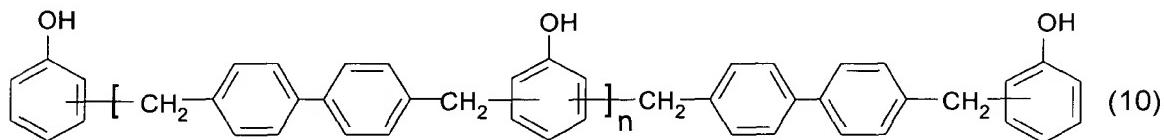
wherein

the epoxy resin (A) is a combinational mixture of biphenyl-4,4'-diglycidyl ether epoxy resin and 3,3',5,5'-tetramethylbiphenyl-4,4'-diglycidyl ether epoxy resin represented by formula (4):



, and

the phenolic resin (B) is a phenolbiphenylaralkyl resin represented by formula (10):



wherein $n = 0$ to 10.

34. (new) A flame retardant epoxy resin composition comprising an epoxy resin (A), a phenolic resin (B), an inorganic filler (C) and a curing accelerator (D):

wherein

said composition is composed of the inorganic filler (C) and

resin components other than the inorganic filler (C) that are comprising the epoxy resin (A), the phenolic resin (B) and the curing accelerator (D), but said composition comprises no flame retardant material nor flame retardant auxiliary;

said composition contains the inorganic filler (C) in the equal amount to a content of W (wt%) for the inorganic filler (C) in a cured article being obtainable by curing the composition, wherein the W (wt%) is selected in range of $60 < W \leq 95$;

the phenolic resin (B) is one or a mixture of two or more phenolic resins containing a biphenyl derivative having no hydroxyl group in the molecule,

the epoxy resin (A) is a mixture of an epoxy resin containing a biphenyl derivative having no epoxy group and an epoxy resin of tetraphenylolethane type including one or more aromatic moieties, to which 3 to 4 epoxy groups are bonded, and

a ratio (OH/Ep) of a phenolic hydroxyl group number (OH) of the total phenolic resin to an epoxy group number (Ep) of the total epoxy resin is $1.0 \leq (OH/Ep) \leq 2.5$;

the moiety of the biphenyl derivative having no hydroxyl group is included in a crosslinked structure of the cured article; and

a flexural modulus E (kgf/mm^2) at $240 \pm 20^\circ\text{C}$ of the cured article is a value satisfying $0.30W - 13 \leq E \leq 3.7W - 184$ in the case of $60 < W \leq 95$, and the cured article forms a foamed layer

during thermal decomposition or at ignition to exert flame retardancy.

—35. (new) The epoxy resin composition according to Claim 34,

wherein

wherein the flexural modulus E (kgf/mm²) at 240 ± 20°C of the cured article is a value satisfying 0.30W - 10 ≤ E ≤ 3.7W - 199 value in the case of 60 < W ≤ 95.

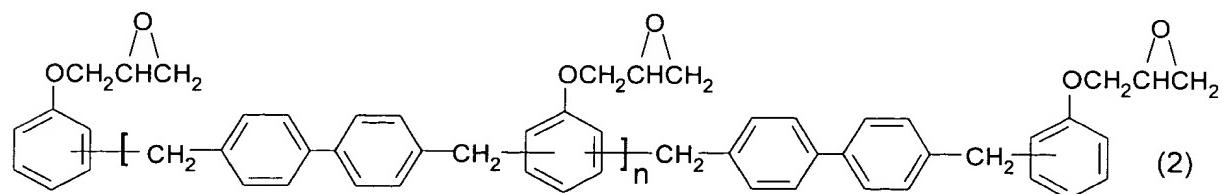
—36. (new) The epoxy resin composition according to Claim 35,

wherein the ratio (OH/Ep) is 1.0.

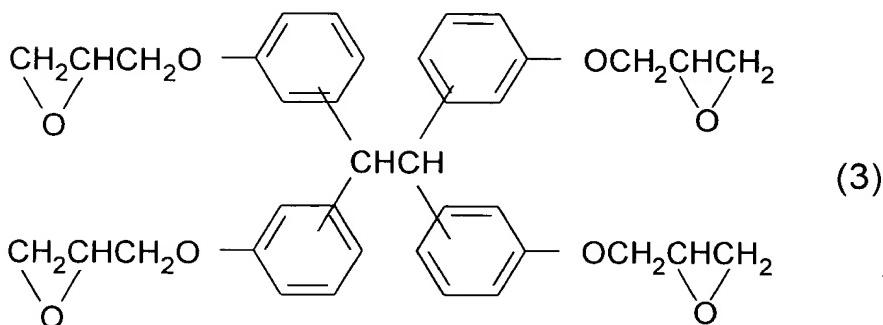
—37. (new) The epoxy resin composition according to Claim 36,

wherein

the epoxy resin (A) is a combinational mixture of a phenolbiphenylaralkyl epoxy resin represented by formula (2):

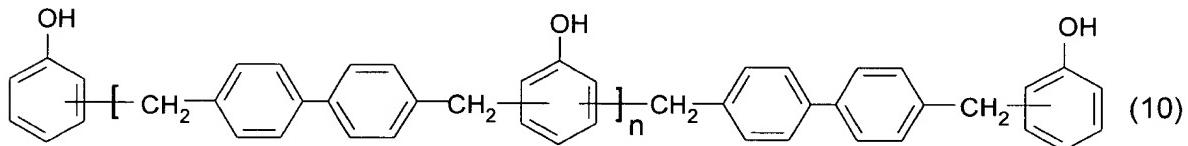


wherein n = 0 to 10, with a tetraphenylolethane type epoxy resin represented by formula (3):



, and

the phenolic resin (B) is a phenolbiphenylaralkyl resin represented by formula (10):



wherein n = 0 to 10.

—38. (new) A semiconductor device in which the epoxy resin composition described in Claim 1 is used as an encapsulating resin.

—39. (new) A flame retardant epoxy resin composition comprising an epoxy resin (A), a phenolic resin (B), an inorganic filler (C) and a curing accelerator (D):

wherein

said composition is composed of the inorganic filler (C) and resin components other than the inorganic filler (C) that are comprising the epoxy resin (A), the phenolic resin (B) and the curing accelerator (D), but said composition comprises no flame retardant material nor flame retardant auxiliary;

said composition contains the inorganic filler (C) in the equal amount to a content of W (wt%) for the inorganic filler (C) in a cured article being obtainable by curing the composition, wherein the W (wt%) is selected in range of $60 < W \leq 95$;

b
said composition has the same contents to those for an epoxy resin composition that is obtainable by adding further amount of the inorganic filler (C) to a flame retardant epoxy resin composition of **Claim 20** having the inorganic filler (C) content of 30 wt% to 60 wt% as to increase the inorganic filler (C) content thereafter up to said W (wt%) selected in range of $60 < W \leq 95$; and

the cured article forms a foamed layer during thermal decomposition or at ignition to exert flame retardancy.

--40. (new) A flame retardant epoxy resin composition comprising an epoxy resin (A), a phenolic resin (B), an inorganic filler (C) and a curing accelerator (D):

wherein

said composition is composed of the inorganic filler (C) and resin components other than the inorganic filler (C) that are

comprising the epoxy resin (A), the phenolic resin (B) and the curing accelerator (D), but said composition comprises no flame retardant material nor flame retardant auxiliary;

said composition contains the inorganic filler (C) in the equal amount to a content of W (wt%) for the inorganic filler (C) in a cured article being obtainable by curing the composition, wherein the W (wt%) is selected in range of $60 < W \leq 95$;

B ()
said composition has the same contents to those for an epoxy resin composition that is obtainable by adding further amount of the inorganic filler (C) to a flame retardant epoxy resin composition of **Claim 21** having the inorganic filler (C) content of 30 wt% to 60 wt% as to increase the inorganic filler (C) content thereafter up to said W (wt%) selected in range of $60 < W \leq 95$; and

the cured article forms a foamed layer during thermal decomposition or at ignition to exert flame retardancy.

--41. (new) A flame retardant epoxy resin composition comprising an epoxy resin (A), a phenolic resin (B), an inorganic filler (C) and a curing accelerator (D):

wherein

said composition is composed of the inorganic filler (C) and resin components other than the inorganic filler (C) that are comprising the epoxy resin (A), the phenolic resin (B) and the curing accelerator (D), but said composition comprises no flame

retardant material nor flame retardant auxiliary;

said composition contains the inorganic filler (C) in the equal amount to a content of W (wt%) for the inorganic filler (C) in a cured article being obtainable by curing the composition, wherein the W (wt%) is selected in range of $60 < W \leq 95$;

said composition has the same contents to those for an epoxy resin composition that is obtainable by adding further amount of the inorganic filler (C) to a flame retardant epoxy resin composition of **Claim 22** having the inorganic filler (C) content of 30 wt% to 60 wt% as to increase the inorganic filler (C) content thereafter up to said W (wt%) selected in range of $60 < W \leq 95$; and

B (

the cured article forms a foamed layer during thermal decomposition or at ignition to exert flame retardancy.

—42. (new) A flame retardant epoxy resin composition comprising an epoxy resin (A), a phenolic resin (B), an inorganic filler (C) and a curing accelerator (D):

wherein

said composition is composed of the inorganic filler (C) and resin components other than the inorganic filler (C) that are comprising the epoxy resin (A), the phenolic resin (B) and the curing accelerator (D), but said composition comprises no flame retardant material nor flame retardant auxiliary;

said composition contains the inorganic filler (C) in the

equal amount to a content of W (wt%) for the inorganic filler (C) in a cured article being obtainable by curing the composition, wherein the W (wt%) is selected in range of $60 < W \leq 95$;

said composition has the same contents to those for an epoxy resin composition that is obtainable by adding further amount of the inorganic filler (C) to a flame retardant epoxy resin composition of **Claim 23** having the inorganic filler (C) content of 30 wt% to 60 wt% as to increase the inorganic filler (C) content thereafter up to said W (wt%) selected in range of $60 < W \leq 95$; and

the cured article forms a foamed layer during thermal decomposition or at ignition to exert flame retardancy.

—43. (new) A flame retardant epoxy resin composition comprising an epoxy resin (A), a phenolic resin (B), an inorganic filler (C) and a curing accelerator (D):

wherein

said composition is composed of the inorganic filler (C) and resin components other than the inorganic filler (C) that are comprising the epoxy resin (A), the phenolic resin (B) and the curing accelerator (D), but said composition comprises no flame retardant material nor flame retardant auxiliary;

said composition contains the inorganic filler (C) in the equal amount to a content of W (wt%) for the inorganic filler (C)

in a cured article being obtainable by curing the composition, wherein the W (wt%) is selected in range of $60 < W \leq 95$;

said composition has the same contents to those for an epoxy resin composition that is obtainable by adding further amount of the inorganic filler (C) to a flame retardant epoxy resin composition of **Claim 24** having the inorganic filler (C) content of 30 wt% to 60 wt% as to increase the inorganic filler (C) content thereafter up to said W (wt%) selected in range of $60 < W \leq 95$; and

the cured article forms a foamed layer during thermal decomposition or at ignition to exert flame retardancy.--

Please charge the fee of \$180 for the ten (10) extra claims of any type added herewith, to our Deposit Account No. 25-0120.

REMARKS

A substitute Abstract of the Disclosure is provided on an accompanying separate sheet.

Claims 1-13 were previously pending in the application. Claims 1-13 are canceled and replaced with new claims 14-43.

Claims 1-13 are rejected as anticipated by, or in the alternative, as obvious over European Patent No. 915,118, or